



Department of Pharmaceutical Sciences

Annual Research Meeting 2020

Abstract and Poster Guidelines

Location

of the meeting: University of Basel, Pharmacenter, Lecture Hall 1
Klingelbergstrasse 50, CH-4056 Basel

Date:

January 30, 2020

Procedure:

January 30, 2020

Starting at 07.00 a.m.: hanging up of posters by PhD-Students and Post Docs
(the lectures start at 08.45 a.m.)

Coffee breaks: poster sessions (total of two)

After 05:00 p.m.: collection of posters by authors

Registration:

All participants register officially via the link on the main page www.pharma.unibas.ch → News & Events → Annual Research Meeting 2020. **Deadline: January 20, 2020**

Abstract:

Please send the abstract of your poster/talk as word file to petra.rohrwild@unibas.ch.
Deadline: December 20, 2019

max. length of title: 120 characters (w/o blanks)

max. size of abstract: 1200 characters (w/o blanks)

Format: Word Document

(you will find an example of an abstract on page 2)

Poster:

max. 80 x 120 cm (A0), portrait format

You can print the posters via the Photo & Print-Shop, Biozentrum.

Important: Please send the pdf of your poster to foto-biozentrum@unibas.ch and indicate that the poster is for the ARM.

Deadline to send your poster to Photo & Print: **January 19, 2020.**

Posters are ready to pick up at the office of Petra Rohrwild (Pharmacenter, 6th floor, room 6002) starting from January 23, 2020

For any further questions, please contact:

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ABSTRACT EXAMPLE:

Interactions of human calcitonin (hCT) derived cell-penetrating peptides with mono- and bilayer models

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Membrane-translocating peptide sequences as carrier peptides for macromolecules represent an innovative drug delivery approach. Human calcitonin (hCT) (CGNLSTCMLG TYTQDFNKFH TFPQTAIGVG AP-NH₂) and selected C-terminal hCT fragments have been shown to be internalized and to permeate the epithelium of the nasal mucosa, whereas the mechanism of uptake and crucial structural features of these peptides are largely unknown. Liposome-buffer partitioning experiments of hCT derived peptides showed a generally high affinity to phospholipid liposomes (up to 2500-fold enrichment in the bilayer). Interaction with neutral POPC LUVs is mainly due to the peptides' lipophilicity, while interaction with negatively charged LUVs is largely governed by their positive charge density. 2-D ¹H NMR studies of hCT(9-32) revealed two alpha-helical domains interrupted by a central Pro and proved the localisation in DPC micelles by means of spin-label probes. Replacing Gly in position 10 or 30 by a Trp led to an increased affinity towards lipid membranes. Furthermore this exchange allowed us to perform Trp-fluorescence quenching studies with a series of membrane-incorporated quenchers to obtain precise information about the localisation in phospholipid bilayers. Supported by internalisation studies on MDCK monolayers these findings suggest an absorptive-mediated endocytosis process as uptake mechanism.